International Journal of Agricultural Science and Research (IJASR)
ISSN(P): 2250-0057; ISSN(E): 2321-0087
Vol. 5, Issue 3, Jun 2015, 89-102

FACTORS AFFECTING RURAL DEVELOPMENT IN EGYPT: GIZA CASE STUDY

MOSTAFA RADWAN[1] & YIN CHANGBIN[2]

[1,2]Institute of Agricultural Sciences and Regional Planning, Graduate School of Chinese Academy of Agriculture Sciences, Beijing, China

ABSTRACT

The aim of this paper was to identify the most important factors affecting rural development in Egypt, and also to identify rural people attitudes towards rural development, as well as to identify the most important problems in the rural areas. Data was collected from 270 respondents from 4 villages in Giza province during June to August 2014. After that, data has been analyzed by the appropriate statistical methods. This paper used the principal component analysis model (factor analysis) and the simple correlation coefficient of Pearson. The results showed that the most important factors affecting rural development in Egypt's villages were: agriculture, small projects and non farm work, also the results showed that the majority of respondents there satisfaction degree towards rural development level was low. In addition, the results showed that there was a positive significant relationship between family size, age, and income and the satisfaction degree of rural people towards rural development level. Finally, the results showed that the most important problems which the people in Egypt's villages face were: the lack of a sewage network, the bad roads network and the lack of irrigation water.

KEYWORDS: Factors, Rural Development, Rural Areas, Egypt

INTRODUCTION

Development generally is concerned with the enhancement of individuals' ability to shape their lives (Sen, 1999). According to Stiglitz, J. (2002), development can be regarded as a transformation of society, a movement from traditional ways of thinking and traditional methods of production to more modern ways. In other words, development must improve all aspects of peoples' lives. This is what Servaes (1999) calls multi-dimensional development.

Madu (2003) characterizes the essence of rural development as the improvement of the spatial and socioeconomic environment of rural space, which leads to the enhancement of the individual's ability to care for and sustain his or her well-being.

Various definitions of rural development underscore its multidimensional nature. Diverse indicators are used to measure the level of rural development in a Community (Reimer, 2002).

The basic problem for countries with emerging economies is to achieve a path of equitable and sustainable development. Such development can be achieved by using natural resources, capital stock, labor, technological information in a stimulating socio-cultural environment. The most popular measure for development is to evaluate infrastructure and utilities in the village (Öney, 1987; Savaş et al., 1999). However, development is not a one dimensional issue, where development could also comprise an increase in quantity and efficiency of production, an increase in the share of the industrial sector in national income and exports, positive structural changes and improvements in the areas of social,

cultural and institutional infrastructure (health, education, environment, natural resource management etc.). Hence, four major elements of development can be distinguished: economic, social, cultural– human, and environmental.

Development varies over time and by location. There is a connection between local distribution of income and resources and welfare of society. Equal local distribution of income and resources is not only important for underdeveloped areas but also for developed areas. An equal local distribution will prevent migration of population to big cities. Hence, this will reduce urban problems such as accommodation, education, health, water, energy, infrastructural services, traffic, noise and environmental pollution. Moreover it will increase the welfare of society and provide sustainable development (Dinçer, 1996).

Every country develops policies and strategies targeted to their own economic and social structure to overcome regional disparities.

To achieve rural development a large variety of measures are needed aiming at improvement of the rural economy, the quality of life of the community, land-use, environmental protection, and the attractiveness to reside in rural areas (Elands and Wiersum, 2001).

A number of studies show the importance of some factors which affecting rural development such as governmental financial support, Agricultural production, Community participation, farmers' cooperatives organizations, non farm activities and animal production (Ashley and Maxwell, 2001; Farrington and Lomax, 2001; Mikos, 2001; Ellis and Biggs, 2001; Sanderson, 2005; Courtney et al., 2006; Lise, 2007; Narain et al., 2008). Also, research has been performed in various countries using socio-demographic variables, social interactions, social ties, utilities, educational, infrastructural and environmental dimensions for rural development (Brenmand and Luloff, 2007; Tilt et al., 2007).

However, these studies generally determine the existing conditions using subjective evaluations and suggestions. Moreover, all the criteria such as natural structure, land use structure, demographic structure, infrastructure and socioeconomic structure have not been considered jointly and are not analyzed numerically (Oddershede et al., 2007).

In order to overcome barriers for rural development, the socio-economic and socio-political structures of the rural region must be analyzed (Tolunay, 2006). Furthermore, (1) the inability to develop plans and programs suitable to stimulate rural development, (2) ignoring people's views and priorities in the field, (3) having a low number of cooperatives, (4) not taking into consideration the characteristics of the region, (5) bureaucratic top-down governance, have stood in the way for successful rural development (Gülçubuk, 2000). Therefore, investigation of development and particularly rural development, establishing factors affecting development and responding to this, carry great importance.

Rural development in Egypt has a long history traced back to the nineteenth century. Generally, the national political system was always very influential in setting up the outline of state orientation towards the rural sector and formatting the type of interrelationship between rural areas and the other state sectors. This fact is valid across the last two centuries regardless of some minor differences and details from time to time (Ahmed, 2005).

Population in Egypt has reached 92.5 million by January 2013. The high growth rate of population in Egypt has resulted in the explosion of its inhabitants by about twelve times since 1882 and by about fifth times since 1947 to the present. In spite of the fact that growth rate stepped down from about 3% to about 1.9% now during the last half century demand on all natural resources specially land and water has intensified tremendously (CAPMAS, 2006).

Egypt consists of 27 provinces, 184 districts, 222 cities, 280 neighborhoods and 4673 villages. Giza province was selected as the study area, because its national income per capita is far below the average of Egypt, and it has the highest share of village population. The population of Giza is 7.5 million with a village population ratio of 74%. The ratio of agricultural employees to total employment is 71% and it is 7th among the 27 provinces of Egypt.

MATERIALS AND METHODS

Data Collection and Sampling

Data of the study was collected from 4 villages from Egypt; Alreqa Alqiblya village, Beni Youssef village, Kafr Qassem village and Monshaat Kasseb village during June - August 2014. Data was collected from 270 rural people. The study employed a structured and semi-structured questionnaire. The questionnaire include four parts, the first part is about the demographic characteristics of the rural people, the second part about the key factors which affecting rural development, the third part about rural people's attitudes towards rural development level, the responses were scored on a five-point Likert's scale ranging from 'Strongly satisfied (5)' to 'Strongly not satisfied (1)' (Likert 1932). The last part about the most serious problems in the village.

Model Establishment and Data Analysis

This study used the principal component analysis model (factor analysis) and the simple correlation coefficient of Pearson. To evaluate all variables together and, thus, to determine the most important factors affecting improvement of the village, the Factor Analysis Model is used with a principal component analysis method (Harman 1997; Hair et al., 1992). A data matrix of N×n for every village is used as input into the principal component analysis. The Varimax criterion with Kaiser Normalization as the rotation method is used in the principal component analysis.

RESULTS

Demographic Characteristics of the Respondents

The results of the study showed in table 1 reveal that a majority (69.3 %) of the respondents their ages more than 45, with the highest concentration in the range of 45-60 years. Majorities (75.2%) of the respondents are male, while about 21.5 percent were female.

A majority (88.5%) of the respondents are married, while 5.6% were single, 3.3 % were widowed, and 2.6% were divorced. It may be inferred that the old people remain in the village is normal because the young persons go to work outside the village and also that is because all of people stay in the village are married because the young people is so little. A majority (72.6%) did not receive any form of education, 11.5 % of respondents had received a primary education, 8.9% had received a junior education, while (7 %) of the respondents came in the category of senior education.

It may be concluded that people who had received formal and high education moved to urban areas to settle down, generally, the people in the villages their level of education is low. For the occupation, (71.5%) of the respondents are farmers and (16.7 %) of the respondents are workers, (10.7%) of the respondents are sales men, while (1.1 %) of the respondents are animal feeders.

About (65.2%) of the respondents come in the category of 4- 6 family members, and about (23.3%) come in the category of 7-9 members, while (11.5%) of the respondents come in the category of 1- 3 members, it may be concluded that the family size in rural areas in Egypt is big, since the lack of awareness towards the family planning programs.

A majority (91.1%) of the respondents their income less than 500000 EGP, while about (8.9%) their income are between 500000 and 100000, It may be inferred that the income level of the rural people is low, as the main source of the income comes from agriculture. About (60 %) of the respondents their main source of income come from farming, and about (31 %) from non farm work, and (7 %) their main source income is Small projects, and (1.5 %) from pensions and subsidies, while about(1 %) from animal breeding.

It may be inferred that due to the low level of education of the rural people, most of them their occupation is farming, and some of them almost 30 % go to non farm work due to lack of employment opportunities in the village and the low income from agriculture, most people especially the young people go out to look for a job to improve their income and standard of living.

Table 1: Distribution of the Respondents in Egypt by their Socioeconomic Characteristics

Attribute		Villagers (n=270)	
		Frequency	Percentage
Age			
	Less than 45	83	30.7
	45 - 60	160	59.3
	More than 60	27	10
Mean 48.35 Max 86 Min 25			
Gender			
	Male	203	75.2
	Female	67	24.8
Marital Status			
	Single	15	5.6
	Married	239	88.5
	Divorced	7	2.6
	Widowed	9	3.3
Educational level			
	Illiterate	196	72.6
	Primary	31	11.5
	Junior	24	8.9
	Senior	19	7
	College	-	-
	Master or above	-	-

Cont'd

Attribute		Villagers (n=270)	
		Frequency	Percentage
Occupation			
	Farmer	193	71.5
	Animal breeder	3	1.1
	Salesman	29	10.7
	Waiter	-	-
	Taxi driver	-	-
	Worker	45	16.7
Family members numbers			
	1 - 3	31	11.5
	4 - 6	176	65.2
	7 - 9	63	23.3
Income per year			
	Less than 50000	246	91.1
	50000 - 100000	24	8.9

Table 1: Contd.,			
	More than 100000	-	-
Mean 9000 Max 54000 Min 4000			
Main Source of Income			
	Working outside	83	30.7
	Farming	112	41.6
	Small project	63	23.3
	Pension and subsidies	9	3.3
	Animal breeding	3	1.1
	Renting their land	-	-

The Key Factors of Rural Development in the Four Villages

The output of the principal component analysis is used to determine the key factors affecting the level of development in the 4 villages. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test was used and the outputs have been presented for the four villages in table 2.

Table 2: KMO and Bartlett's Test in Egypt's Villages

KMO and Bartlett's Test					
Villages		**Alreqa Alqeblya**	**Beni Youssef**	**Kafr Qassem**	**Monshaat kasseb**
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.590	.700	.617	.631
Bartlett's Test of Sphericity	Approx. Chi-Square	167.216	145.305	88.180	113.428
	df	45	45	45	45
	Sig.	.000	.000	.000	.000

In the principal component analysis, the component matrix was rotated using an orthogonal rotation (Varimax method), in which the factors are independent of each other (Hair et al., 1992), which are scientifically easier to explain, and just the most important two factors in every village are presented. The total variance explained on all villages is presented in table 3.

The component matrix is given in Table 4 and the derived factors are named and interpreted based on the factor loadings in the component matrix. In order to clearly see the variable groups, the dominating factors (with absolute factor loadings larger than 0.5) that determine the two factors are presented (Harman, 1997; Bennet and Bowers, 1977; Mucuk, 1978; Daşdemir, 1996, 2005).

In Alreqa Alqeblya village, the first 3 factors (or components), of which the eigenvalues are larger than 1 (Kaiser Criterion), are extracted in a principal component analysis based on the 10 variables. Thus, the 10 variables were reduced to 4 factors. Figure 1 shows the eigenvalues of the components. According to the results of the principal component analysis, more than (56 %) of total variance among the 10 variables was explained by these 3 factors.

The first component (Factor) is the most important factor which explains over (31 %) of total variance. Factor 1 consists of the X2 (Agriculture) and X3 (Education) variables in order of priority. X1 is the highest factor loading (0.749), so it is taken as representative for this factor. There is no doubt that agricultural production income play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village.

Factor 2, explains 14.5 % of total variance and has a significant loading on only 1 variable, namely, X4 (small

projects). It has a factor loading of 0.556. There is no doubt that small projects play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village.

In Beni Youssef village, the first 4 factors (or components), of which the eigenvalues are larger than 1 (Kaiser Criterion), are extracted in a principal component analysis based on the 10 variables. Thus, the 10 variables were reduced to 4 factors. Figure 2 shows the eigenvalues of the components. According to the results of the principal component analysis, (66.7 %) of total variance among the 10 variables was explained by these 4 factors.

Factor 1, explains 30.4 % of total variance and has a significant loading on 2 variables, namely, X8 (Non-farming work) and X5 (Infrastructure) variables in order of priority. X8 has the highest factor loading (0.794), so it is taken as representative for this factor. Due to lack of employment opportunities in the village, and the little income from working inside the village, most of the young people go to work outside and send money to their families, and this contributed in the development of the rural people in the village.

Factor 2, explains 13.3 % of total variance and has a significant loading on one variable, namely, X4 (small projects) which has a factor loading of 0.580. There is no doubt that small projects play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village.

In Kafr Qassem village, the first 3 factors (or components), of which the eigenvalues are larger than 1 (Kaiser Criterion), are extracted in a principal component analysis based on the 10 variables. Thus, the 10 variables were reduced to 3 factors. Figure 3 shows the eigenvalues of the components. According to the results of the principal component analysis, (51.6 %) of total variance among the 10 variables was explained by these 3 factors.

The first component (Factor) is the most important factor which explains over (22.4 %) of total variance. Factor 1 consists of the X4 (Small projects) and X9 (Number of family members) variables in order of priority. X4 is the highest factor loading (0.799), so it is taken as representative for this factor. There is no doubt that small projects play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village.

In Monshaat Kasseb village, the first 4 factors (or components), of which the eigenvalues are larger than 1 (Kaiser Criterion), are extracted in a principal component analysis based on the 10 variables. Thus, the 10 variables were reduced to 4 factors. Figure 4 shows the eigenvalues of the components. According to the results of the principal component analysis, (63.5 %) of total variance among the 10 variables was explained by these 4 factors.

The first component (Factor) is the most important factor which explains over (26.8 %) of total variance. Factor 1 consists of the X2 (Agriculture) and X7 (Distance to the urban center) variables in order of priority. X2 is the highest factor loading (0.856), so it is taken as representative for this factor. There is no doubt that agricultural production income play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village.

Factor 2, explains 13.6 % of total variance and has a significant loading on only 1 variable, namely, X9 (Number of family members) which has a factor loading of 0.773.

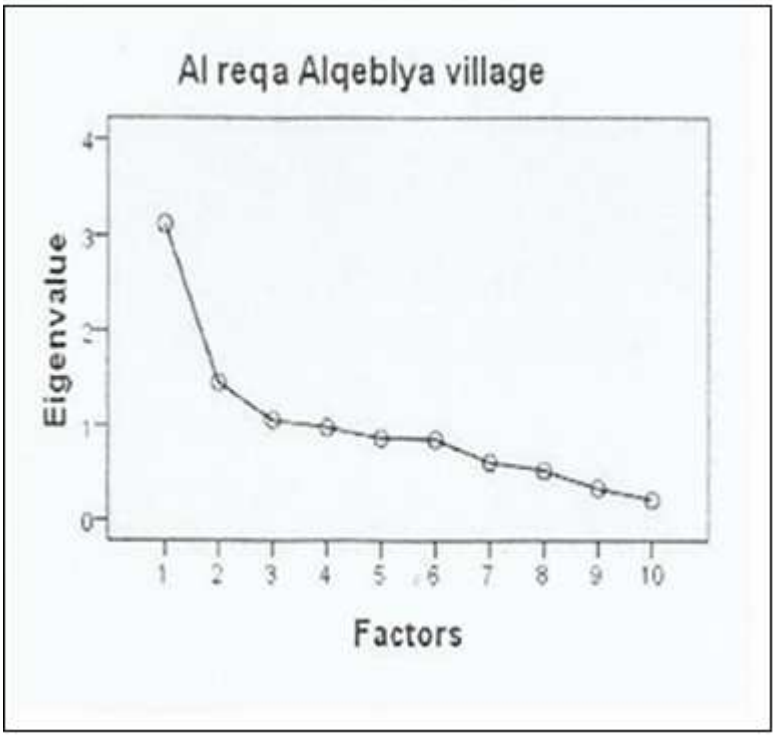

Figure 1: Eigen Values of Extracted Factors in Alreqa Alqeblya

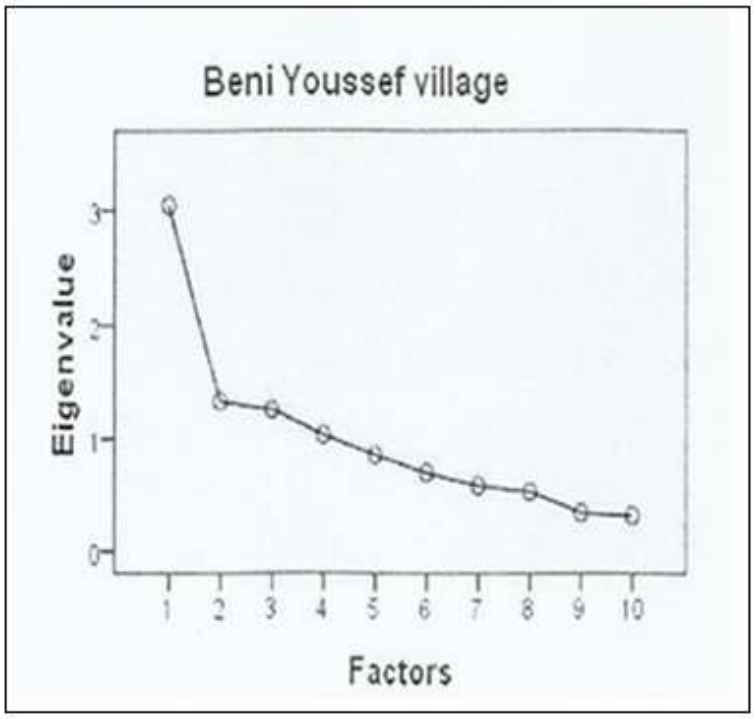

Figure 2: Eigen Values of Extracted Factors in Beni Youssef

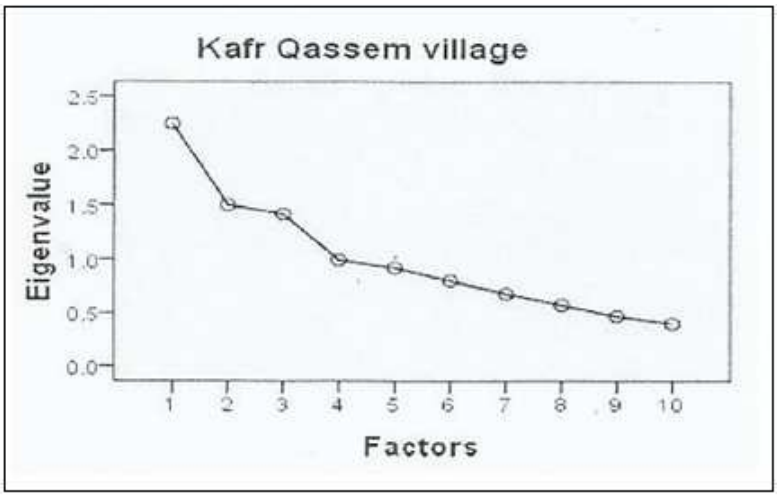

Figure 3: Eigen Values of Extracted Factors in Kafr Qassem

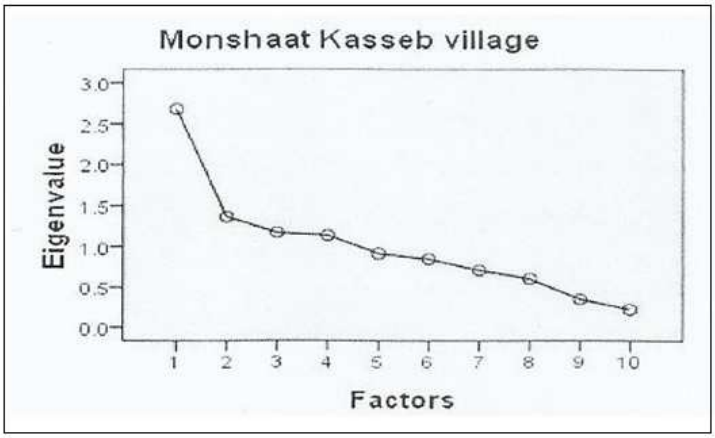

Figure 4: Eigen Values of Extracted Factors in Monshaat Kaseeb

Table 3: Total Variance Explained in Egypt's Villages

	Alreqa Alqeblya			Beni Youssef			Kafr Qassem			Monshaat kasseb	
Component	Eigen values	% of variance	Cumulative %	Eigen values	% of variance	Cumulative %	Eigen values	% of variance	Cumulative %	Eigen values	% of variance	Cumulative %
1	3.117	31.169	31.169	3.043	30.431	30.431	2.247	22.474	22.474	2.680	26.800	26.800
2	1.457	14.568	45.737	1.335	13.349	43.780	1.499	14.995	37.469	1.362	13.621	40.421
3	1.059	10.588	56.325	1.260	12.597	56.377	1.416	14.157	51.627	1.172	11.716	52.137
4	.980	9.803	66.128	1.034	10.345	66.722	.993	9.928	61.555	1.138	11.381	63.517
5	.867	8.671	74.799	.856	8.564	75.285	.919	9.187	70.742	.912	9.125	72.642
6	.855	8.554	83.353	.699	6.987	82.273	.801	8.014	78.756	.848	8.480	81.122
7	.605	6.053	89.406	.584	5.840	88.113	.678	6.775	85.531	.708	7.084	88.206
8	.521	5.212	94.617	.529	5.291	93.404	.574	5.742	91.273	.607	6.070	94.276
9	.330	3.296	97.914	.342	3.417	96.821	.471	4.715	95.988	.349	3.486	97.761
10	.209	2.086	100.00	.318	3.179	100.00	.401	4.012	100.00	.224	2.239	100.00

Table 4: Component Matrix of Egypt's Villages

	Alreqa Alqeblya		Beni Youssef		Kafr Qassem		Monshaat kasseb	
	1	2	1	2	1	2	1	2
Animal breeding	.491	.114	.337	.353	.201	.365	.050	.158
Agriculture	.749*	-.094	.705	-.099	.089	.375	.856*	-.038
Education	.676	-.462	.694	.257	.652	.264	.204	-.058
Small projects	.269	.556	.306	.580	.799*	-.067	.772	.204
Infrastructure	.606	-.579	.731	-.321	.675	-.317	.017	-.551
Services	.327	.239	.225	-.681	.256	-.662	-.098	.386
Distance to the urban center	.386	.271	.293	.391	.100	.353	.863	.040
Non farming work	.631	.467	.794*	-.261	.070	.456	-.564	.467
Number of family members	.583	-.315	.689	.086	.711	.312	.113	.773
Farmers' cooperative org	.652	.360	.287	.055	.306	-.428	.472	.144

In Summary, several meaningful findings could be obtained when a combined analysis is conducted on the key factors affecting rural development. First, the most important factor which affects the rural development in Alreqa Alqeblya village is agriculture factor which has 3.117 eigenvalue and explain more than 31 % of the total variance. There is no doubt agriculture play an important role in enhancement the income of the villagers, so the results shows that it is an important factor in the development of the village. 73.2% of the respondents said that agriculture is the main source of their income, most people plant vegetables, the vegetables production are 84 ton, and they plant tomatoes, eggplant, cabbage, beans, okra and pepper. Also they plant crops the crops production are 63 ton, and they plant wheat, onion, maize, peanut and sesame. And the production from the fruits is 11 ton.

Second, the most important factor affecting the development in Beni Youssef village is non farming work factor which has 3.043 eigenvalue and explains more than 30 % of the total variance. Due to lack of employment opportunities in the village, and the little income from farming, most of the young people go to work outside in non farm work and send money to their families, and this contributed in the development of the rural people in the village. 67.3% of the respondents said that the working outside the village is the main source of their income, and most families have at least one person work outside, and they join different jobs, so it is a significant factor of the development of the village.

Third, the most important factor affecting the development in Kafr Qassem village is small projects factor which has 2.247 eigenvalue and explain more than 22 % of the total variance. There is no doubt that small projects play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village. 51.3% of the respondents said that the small project is the main source of their income.

Finally, the most important factor affecting the development in Monshaat Kasseb village is the agriculture factor which has 2.680 eigenvalue and explains more than 26 % of the total variance. There is no doubt that agricultural production play an important role in enhancement of the standard living of the villagers, so the results shows that it is an important factor in the development of the village. 57.2% of the respondents said that agriculture is the main source of their income, most people plant fruits, the fruit production are 28 ton, date is the most fruit planted by the villagers, as the production from it is 28 ton every year. In addition, they plant apple, banana, orange and mango. Also they plant crops the crops production are 51 ton, and they plant wheat, onion, maize, peanut and sesame. In addition, vegetables production is 26 ton, and they plant tomatoes, eggplant, cabbage, beans, okra and pepper.

Rural People Satisfaction Degree towards Rural Development Level

To identify the satisfaction level of rural people towards rural development level in every village, 10 indicators have beet placed, the level of satisfaction has been calculated by accumulating the satisfaction degree of each indicator, after that the total degree has been divided to 4 levels, high satisfaction, medium satisfaction and low satisfaction, and the results can be showed in (Table 5), which shows that the majority of the respondents in all the villages, Alreqa Alqeblya village, Beni Youssef, Kafr Qassem, and Monshaat kasseb have a low satisfaction towards rural development level by percentages 67.1 %, 77.1 %, 58.6 %, and 73.3 % respectively. It may be concluded that due to the various problems which exist in these villages like the poor infrastructure, the high unemployment and poverty, Poor investment environment, Poor marketing of agricultural products locally and externally, the high cost of agricultural production and Lack of services, all these problems lead to this level of satisfaction.

To test the relationship between rural people attitudes towards rural development level and age, education, income and number of family members, person correlation coefficient was used, the results in table 7 shows that there is there is a positive significant relationship between rural people attitudes towards rural development level and age, number of family members and income, as the values of the pearson correlation coefficient were 0.276, 0.261 and 0.291, respectively, and all of them are significant at the 0.01 level.

Table 5: Satisfaction Level of Rural People towards Rural Development in Egypt

	Alreqa Alqeblya		Beni Youssef		Kafr Qassem		Monshaat kasseb	
Attribute	**freq**	**%**	**freq**	**%**	**freq**	**%**	**freq**	**%**
High satisfaction	9	12.9	5	7.2	7	10	3	5
Medium satisfaction	14	20	11	15.7	22	31.4	13	21.7
Low satisfaction	47	67.1	54	77.1	41	58.6	44	73.3

Table 6: The Relationship between Rural People Attitudes Towards Rural Development Level and Age, Education, Income and Number of Family Members in Egypt

Correlations						
		Age	**Education**	**Number of Family Members**	**Income**	**Attitudes**
Age	Pearson Correlation	1	-.204	-.042	.032	.276**
	Sig. (2-tailed)		.186	.547	.763	.000
	N	270	270	270	270	270
Education	Pearson Correlation	-.204	1	.278	.374	.178
	Sig. (2-tailed)	.186		.087	.113	.087
	N	270	270	270	270	270
Number of family members	Pearson Correlation	-.042	.278	1	.295**	.261**
	Sig. (2-tailed)	.547	.087		.000	.000
	N	270	270	270	270	270
income	Pearson Correlation	.032	.374	.295**	1	.291**
	Sig. (2-tailed)	.763	.113	.000		.000
	N	270	270	270	270	270
Attitudes	Pearson Correlation	.276**	.178	.261**	.291**	1

	Table 6: Contd.,					
	Sig. (2-tailed)	.000	.087	.000	.000	
	N	270	270	270	270	270
**. Correlation is significant at the 0.01 level (2-tailed).						

Problems in the Villages

The results (Table 6) show that all the respondents in all villages said that the most serious problem is no sanitation net. And more than (84 %) of the respondents in Alreqa Alqeblya village said that the most serious problem is the bad condition of roads and transportation, while about (38.5 %) of the respondents said that the most serious problem in the village is that government support for medical treatment need to be increased, and about 56 % of the respondents said that the most serious problem in the village is the lack of irrigation water.

For Beni youssef village, almost (93 %) of the respondents said that the most serious problem is the bad condition of roads and transportation, and almost (53 %) of the respondents said that the most serious problem in the village is that government support for medical treatment need to be increased. And about (13 %) of the respondents said that the most serious problem in the village is the lack of irrigation water.

For Kafr Qassem village, almost (67 %) of the respondents said that the most serious problem is the bad condition of roads and transportation, while (44.3 %) said that the most serious problem in the village is that government support for medical treatment need to be increased, and about (16 %) of the respondents said that the most serious problem in the village is the lack of irrigation water.

In Monshaat Kasseb village, almost (87 %) of the respondents said that the most serious problem is the bad condition of roads and transportation, and more than (68 %) of the respondents said that the most serious problem in the village is the lack of irrigation water. while (41.7 %) said that the most serious problem in the village is that government support for medical treatment need to be increased. In summary, it is clear that the most serious problem which the people in all villages suffer from is lack of sanitation network, as all the respondents in all villages mentioned this problem. Poor water sanitation is a critical environmental issue in communities in rural Egypt, where about two-thirds of the rural population, or 65 million people, do not have access to improved sewage systems. Most villages contain untreated sewage water that flows directly into holes in the ground, leaching into ground water used for drinking and agriculture. As a result, many residents suffer from water-borne diseases, the problems of water sanitation and sewage in rural areas are causing many challenges and difficulties for the local population, which affects their lives and living conditions. From the development perspective, Egypt cannot be economically developed if it does not concentrate on human development, as a goal in itself. Rural areas, in particular, have to be focused upon, in order to develop the conditions of water sanitation and sewage. The central government should provide the rural areas with the same care and concern, just like the urban areas. There should be a more efficient monitoring system that detects the problems at an early stage and analyzes them thoroughly, to provide the most proper solutions. This monitoring system should cover all areas in Egypt, with a focus on rural areas, and should act independently. The improvement of the sewage system is the first step towards the betterment of water sanitation in Egypt. This particular issue should be prioritized on the government's agenda.

The second problem which most of the rural people suffer from is the bad condition of roads network and transportation, as most of the respondents in all villages mentioned this problem; in Alreqa Alqeblya more than 84 % of the

respondents mentioned this problem, in Beni Youssef about 93 % % of the respondents mentioned this problem, in Kafr Qassem about 67 % % of the respondents mentioned this problem, and in Monshaat Kasseb almost (87 %) of the respondents mentioned this problem. road network connectivity and level of road accessibility were found to be poor in the study areas. Also, transport services are generally poor and inadequate in rural areas. In general, roads facilitate development; new roads will improve transport; improved transport will solve access problems; better access improves living conditions and creates alternative income earning opportunities. Improving the rural road network will improve the accessibility of district centers, provincial centers and other important locations. It is therefore likely to have a positive effect on the accessibility of high schools, dispensaries, pharmacies and hospitals, markets and shops, government services and employment centers.

Table 7: Village Problems

	Alreqa Alqeblya		Beni Youssef		Kafr Qassem		Monshaat kasseb	
Problems	**frequ**	**%**	**frequ**	**%**	**frequ**	**%**	**frequ**	**%**
Lack of sanitation network	70	100	70	100	70	100	60	100
Lack of medical treatment services	27	38.6	37	52.9	31	44.3	25	41.7
Lack of irrigation water	39	55.7	9	12.9	11	15.7	41	68.3
Roads net and transportation are bad	59	84.3	65	92.9	47	67.1	52	86.7

CONCLUSIONS

There were many researches on rural development. However, there have been a few researches on the key factors affecting rural development. This study was conducted in order to identify three main issues. The first is to investigate the key factors affecting rural development in Giza governorate. More than half of the populations of Giza are rural. Thus, identifying the key factors affecting rural development was one of the goals of the study. Secondly, to identify rural people's attitudes towards rural development level. Thirdly, to identify the most serious problems exist in the rural areas. This study was conducted in 4 villages in Egypt. The number of the sample was 270 respondents. Data were collected by personal interview questionnaire during the period June – August 2014. The study used the principal component analysis model (factor analysis). To evaluate all variables together and, thus, to determine the most important factors affecting improvement of the village, the Factor Analysis Model is used with a principal component analysis method. The results of study showed that the key factors affecting rural development in Giza, Egypt were agriculture, non farm work, small projects and agriculture, which explain more than 23 %, 19 %, 24 % and 18 % of the total variance, respectively. And there is a significant factor in Egypt which is agriculture. For rural people satisfaction degree towards rural development level, the results shows that the majority of the respondents in all the villages, Alreqa Alqeblya village, Beni Youssef, Kafr Qassem, and Monshaat kasseb have a low satisfaction towards rural development level by percentages 67.1 %, 77.1 %, 58.6 %, and 73.3 % respectively. There was a positive significant relationship between rural people attitudes towards rural development level and age, number of family members and income, as the values of the Pearson correlation coefficient were 0.276, 0.261 and 0.291, respectively, and all of them are significant at the 0.01 level. For the most serious problems; the majority of the respondents said that lack of sanitation network, the bad condition of roads network and transportation very serious problems.

REFERENCES

1. Sen, A. (1999). *Development as freedom.* Oxford: Oxford University Press.
2. Stiglitz, J. (2002). Participation and development: Perspectives from the Comprehensive development paradigm. *Review of Development Economics*, *6*(2), 163-182.
3. Servaes, J. (1999). *Communication for development: One world, multiple cultures.* Cresskill, New Jersey: Hampton Press.
4. Madu, I. A. (2003). Institutional framework for rural development administration in Nigeria. *Journal of Rural Development*, *22*(1), 45–64.
5. Reimer, B. (2002). Exploring diversity in rural Canada. In *Measuring Rural Diversity Conference Proceedings November 21-21, 2002.* Washington, D. C.: Economic Research Service.
6. Öney, E., 1987. Economic Planning (5th Edition). Savaş Publications, Ankara. 308 pp. Rasul, G., Thapa, G. B., Zoebisch, M. A., 2004. Determinants of land-use changes in the Chittagong Hill Tracts of Bangladesh. Applied Geography 24, 217–240.
7. Savaş, V., Han, E., Kaya, A. A., 1999. Economic Planning. Anatolia University Publication No.1121/604, Eskişehir. 338 pp.
8. Dinçer, B. 1996. Research on ranking of the cities according to their socio-economic developing degrees. http://ekutup.dpt.gov.tr/bolgesel 13.09.2007, Turkey. 104 pp.
9. Elands, B., Wiersum, K. F., 2001. Forestry and rural development in Europe: an exploration of socio-political discourses. Forest Policy and Economics 3, 5–16.
10. Ashley, C., Maxwell, S., 2001. Rethinking rural development. Development Policy Review 19 (4), 395–425.
11. Farrington, J., Lomax, J., 2001. Rural development and the new architecture of aid: convergence and constraints. Development Policy Review 19 (4), 533–544.
12. Mikos, P., 2001. The european commission perspective on rural development: integrating new trends into multi-sectoral approaches. Development Policy Review 19 (4), 545–552.
13. Ellis, F., Biggs, S., 2001. Evolving themes in rural development 1950s–2000s. Development Policy Review 19 (4), 437–448.
14. Sanderson, S., 2005. Poverty and conservation: the new century's "Peasant Question?" World Development 33 (2), 323–332.
15. Courtney, P., Hill, G., Roberts, D., 2006. The role of natural heritage in rural development: an analysis of economic linkages in Scotland. Journal of Rural Studies 22, 469–484.
16. Lise, W., 2007. An Econometric and Game Theoretic Model of Common Pool Resource Management: People's Participation in Forest Management in India. Nova Science Publishers Inc, Hauppauge, New York.
17. Narain, U., Gupta, S., Veld, K. V., 2008. Poverty and resource dependence in rural India. Ecological Economics

66, 161–176.

18. Brenmand, M. A., Luloff, A. E., 2007. Exploring rural community agency differences in Ireland and Pennsylvania. Journal of Rural Studies 23, 52–61.
19. Tilt, J. H., Kearney, A. R., Bradley, G., 2007. Understanding rural character: cognitive and visual perceptions. Landscape and Urban Planning 81 (1–2), 14–26.
20. Oddershede, A., Arias, A., Cancino, H., 2007. Rural development decision support using the Analytic Hierarchy Process. Mathematical and Computer Modeling 46 (7–8), 1107–1114.
21. Tolunay, A., 2006. Development and rural development: main concepts and definitions. SDÜ Journal of Forest Faculty, Series A 2, 116–127 Isparta.
22. Gülçubuk, B., 2000. Effectiveness of rural development politics of GAP Region. Annual of Rural Environment. KIRÇEV Publication, Ankara, pp. 32–43.
23. Ahmed, A. Fouad. 2005. Rural Sociology, Cairo Modern Library.
24. CAPMAS (Central Agency for Public Mobilization a Statistics, Egypt). The Statistical Year Books, 2006.